Appendix G
COIC Checklist

G–1. Use of the COIC checklist
The COIC Checklist should be used by COIC preparers, staffers at all levels, and by those individuals involved in the preparation, review, and approval of COIC. The COIC checklist covers—

— Format and content.
— HQDA review and approval.

The COIC checklist applies to materiel, tactical C4I/IT, and non-tactical C4/IT systems. All questions are intended to be answered "yes." If a question is answered "no," the applicable element should be reworked or justification provided.

G–2. COIC format and content
a. Heading.
(1) Does it state "Critical Operational Issues and Criteria for"?
(2) Does it contain the system name?
(3) Does it identify the applicable TEMP?
b. Format.
(1) Is there a scope, criteria, and rationale paragraph for each issue?
(2) Does paragraph numbering follow the dendritic format of X.0–Issue, X.1–Scope, X.2–Criteria, and X.3–Rationale? (X is the issue number; for example, 1 or 2.)
(3) Does each criterion have an associated rationale subparagraph?
(4) Are the mandatory notes and other system peculiar notes included?
c. Content—Issues.
(1) Do the issues reflect only those few key operational concerns for determining the system's readiness at the FRP decision review?
(2) Are the issues in the form of questions to be answered "yes" or "no" (that is, no issue should be investigative in nature—"How well" or "What is")?
(3) Are the issues based on the MNS?
(4) Are the issues operationally realistic and do they ask if/whether a task/function or mission can be achieved?
(5) Do the issues focus on the total operational system and not its component parts?
(6) Do the issues focus the decision? (They should not over generalize, for example, "Is system X operationally effective/sustainable in an operational environment?)
(7) Are issue statements free of criteria (for example, performance standards)?
(8) Has overlapping coverage between issues been avoided to the degree possible and appropriate?
d. Content—Scope.
(1) Does the scope identify the operational capabilities to be examined?
(2) Are terms peculiar to the system and evaluation of each issue defined?
(3) Are the tactical context and scenario(s) applicable to the evaluation of each issue identified?
(4) Are key system deployment and organizational structure factors applicable to the evaluation identified?
(5) Are applicable approved threat documents referenced?
(6) Are applicable crew and maintainers identified?
(7) Are key natural and battlefield environments identified?
(8) Have requirements for technical testing and modeling analysis been identified?
(9) Is the scope free of criteria and requirements statements?
(10) Is the scope free of requirements for statistical confidence levels applicable to the criteria?
e. Content—Criteria.
(1) Is there at least one criterion for each critical operational issue?
(2) Is each criterion a "show stopper" for the FRP decision? Would you say no to FRP if the criterion was not satisfied based on what you know now?
(3) Do the criteria represent a performance threshold (for example, quicker delivery of mission/operational orders

(MS B TEMP) or delivery of mission/operational orders within 1 hour on the average after initiation of operations (MS C TEMP))?

(4) Are the criteria few in number (on the average about 10 is right significantly fewer for single shot item and more for a family-of-systems) about 2 to 4 per issue normally?

(5) Has the PM/MATDEV confirmed that the criteria are technically feasible and achievable by FRP DR within the planned program?

(6) Does the system evaluator have a viable concept for evaluating the criteria and can this plan be executed within the program?

(7) Can the necessary doctrine, TTP, training, leader developments, organization, and soldier products be developed, matured and ready for the player unit for IOT to support achievement of these criteria?

(8) Are all criteria based on or derived from requirements documented in the ORD and AoA and do they reflect the critical operational needs and constraints? (The criteria do not have to be a direct lift but must be traceable to approved ORD and AoA.)

(9) Do the criteria reflect a level of system maturity appropriate to the milestone TEMP (for example, "soft" for MS B but "firm" for MS C)?

(10) Has overlapping coverage among criteria been avoided to preclude multiple failure for a single shortfall?

(11) Are all criteria that are not total operational system measures (the preference) fully justifiable (operational FRP decision "show stoppers")?

(12) Do criteria reflect only essential operational requirements (not desired capabilities)?

(13) Wherever possible, are higher order measures of performance (for example, probability of kill, or probability of successful communications) stated rather than those of contributing components (for example, individual probabilities for detecting, engaging, hitting, and killing a target; probabilities for connectivity message accuracy, reliability, availability, and maintainability)?

(14) Do the criteria avoid the use of force exchange ratio, loss exchange ratio, or similar operational effectiveness measures more appropriate for AoA/modeling? If used, have modeling and simulation analyses been required in the scope paragraph to expand beyond trials available in test?

(15) Is a baseline comparison used only when a specific performance measure cannot be derived, when directed by higher authority, or to reduce the chance of bias during test and evaluation?

(16) If a baseline comparison is used, and performance improvement is the objective, is an improvement percentage specified?

(17) Are qualitative criteria measurable?

(18) Are all constraint conditions applicable to evaluation of each criteria stated and consistent with the scope (for example, MOPP IV, and electronic warfare)?

Note. They may also be included in the system peculiar notes.

(19) Are all definitions applicable to evaluation of each criterion stated and consistent with the scope (for example, firepower kill, and payload)?

Note. They may also be included in the system peculiar notes.

(20) Have potential ambiguities which could result in erroneous T&E been avoided?

(21) Are probabilistic criteria used when man-machine interface dependent (for example, X percent of attempts or median time)?

(22) Is the appropriate level system (that is, individual system, team, and platoon) addressed by each criteria? (Criteria must be the lowest level appropriate for the system—an individual system is preferred; an organizational element should be used when the system's primary mission contributes to unit performance.)

(23) Are all measures of performance critical to the FRP decision covered? (No key criteria should be excluded because the data source was other than operational test or problems collecting needed data were anticipated.)

(24) Are criteria free of confidence levels?

f. Content—Rationale.

(1) Do the rationale statements justify each criterion?

(2) Are reasons stated for selecting the characteristic/capability used?

(3) Are the ORD and other source document paragraph references identified?

(4) Are complete references provided for criteria derived by combining characteristics or capabilities?

(5) Is an audit trail to the AoA provided?

g. Content—Notes.

(1) Are mandatory notes #1 and #2 present?

(2) Have total operational system criteria been identified in mandatory note #1?

(3) Is mandatory note #3 present for COIC in support of the MS B TEMP?

(4) Are notes peculiar to the system, as referenced in the body of the COIC, provided?

G–3. COIC review and approval—systems requiring approval by HQDA (DCS, G–8 and CIO/G–6)

a. For MACOM, HQ forwarding to HQDA:

(1) Is the ORD approved?

(2) Are the following coordinations complete:

(a) Proponent—coordination with PM/MATDEV and ATEC?

(b) HQ, MACOM—command position coordination within HQ, MACOM and with PM/MATDEV, ATEC and the action officer in DAPR–FDR or SAIS–ION?

(3) Have all concurred with the COIC? (If "No," strong rationale must be provided for MACOM, HQ COIC approval authority consideration.)

(4) Are the ORD–COIC Crosswalk Matrices ready?

b. For HQDA (DCS, G–8 and CIO/G–6) approval:

(1) Does the COIC MACOM, HQ forwarding memo contain the ORD–COIC Crosswalk Matrix?

(2) Has the CG, ATEC and the PM/MATDEV concurred with the COIC?

(3) If the CG, ATEC or the PM/MATDEV nonconcurred and MACOM, HQ disagrees with the nonconcurrence, has a joint CG, ATEC; PM/MATDEV; MACOM, HQ; and HQDA (DCS, G–8 or CIO/G–6) COIC approval authority forum been set for resolution?

(4) Have the appropriate DA staff elements concurred with the COIC?